

can view online learning resources after class. Students can control when, where, how and to what extent they learn. Students can also use the Internet to help partners or teachers access new information they do not understand. the Canvas online learning and back-to-school model provide students with maximum freedom in a relaxed Japanese learning environment.

4.1. Considerations from a self-directed learning perspective

The learning objectives designed to measure individual development are primarily intellectual and situational. These two dimensions also include implicit data acquisition, structural data acquisition, situational selection, and situational choice. Table 4 shows the general conditions and differences between the test and reference levels. The mean value was 32.76 for the study group and 33.40 for the control group, which was higher than the mean value for the study group. The standard deviations for the control group were 5.29 and 3.98, respectively, which were higher than those for the control group. independent tests of the T-sample showed that Sig=0.55>0.05. Thus, the experimental and control class students were much higher than the control class students in the pretest, and the control class students were much higher than the control class students.

Table 4 Perspective consideration of the differences in learning goals between the experimental process and the general group

	Class	Statistic N value	Mean value	standard deviation
Objective determination	Experimental group	63	29.63	4.63
	Control group	54	28.63	3.81
T-value analysis	Variance equal		.11	
	Variance not equal		.63	

The school has limited network equipment and lacks technical support to monitor student learning. In the Canvas-style e-learning model and flipped classroom, online testing is an important part of the student learning process. Students have long been accustomed to passive learning and homework. Teachers do not know what students are doing at home. This new way of learning also requires teachers to keep track of their students' online learning. If they are not able to stay in school for long periods, it is difficult to ensure that students remain enthusiastic about learning. It's easy to get lazy and not know how to organize learning, so you can't guarantee that there will be questions in class or that interaction will begin in class. As time builds up, students are unable to complete their learning tasks and face a vicious cycle of growth and knowledge.

In practice, the authors note that some group members and some students trust other members with low active

participation. Throughout the classroom, find that students' participation in the classroom varies. Some students do not want to participate in group discussions because they are lazy or introverted. They are used to listening to others' opinions. Over time, they became dependent on their peers. Instead of actively participating in the debates, they learn from other members afterwards, thus valuing the results. This is not only harmful to your research, but to others as well.

In addition, Canvas' online learning and assessment space places a high demand on the IT skills of the faculty. However, due to personal skills and lack of IT knowledge, making educational films was not perfect or great and remained unattractive. The video quality needs to be improved. In addition, manual design has a significant impact on the effective implementation of Canvas online learning and flipped classrooms. Think about how to design lessons that are appropriate for local students. In short, while Canvas online learning and ruined classrooms have been effective for a short period, it remains to be seen whether it will be used for learning Japanese in the long term. When implementing Canvas online learning and flipped classrooms, teachers should develop strategies to address teaching and learning issues.

4.2. Considerations for teachers' learning content selection

Educational content selection is primarily concerned with the selection and application of knowledge. Both programs will also create opportunities for the selection of structural information, the selection of implicit information, and the application and practical application of migration. Table 5 summarizes the overall situation and differences between the test and reference levels. The average test level was 38.27 and the mean test level was 38.68. The test results were slightly higher than the experimental results. The standard deviation was 6.39 for the experimental group and 4.04 for the control group. the experimental group was more like the control group. independent testing of the T-sample indicated that Sig=0.74>0.05. Therefore, students in the experimental and control classes had more options for information structure on the pretest than students in the experimental class.

Table 5 Perspective consideration of the differences in learning content during the experiment and the regular group

	Class	Statistic N value	Mean value	standard deviation
Objective determination	Experimental group	63	40.351	7.63
	Control group	54	39.631	6.31
T-value analysis	Variance equal		0.63	
	Variance unequal		0.85	

The Canvas learning phase is relatively easy to

understand and manage. However, unlike natural learning methods, this is a practical part. To learn a foreign language, you need to open your mouth and improve your silly foreign language habits. Before the class, students must practice a lot of self-study in the five areas of speaking and oral expression: listening, speaking, reading, writing, and translating. This promotes understanding, application and adoption of the content. Therefore, learning planning must begin with a philosophy of instruction, learning objectives, curriculum design, levels and learning activities, and adapt a specific and systematic set of learning materials for widespread use in this area.

The teacher must explain the purpose of learning. When defining learning objectives, it is usually necessary to clearly state how the objectives will be assessed. Training objectives should be defined based on the educational content. Learning objectives should be as detailed as possible to make them more effective. For example, considering the grammar score of the module, students should find an appropriate grammar explanation based on the assessment test, which they can use to create sentences and extend them to short points.

4.3. Dimensional analysis of the learning process

The main dimensions that regulate the learning process are time regulation, resource regulation, and volitional regulation. These three domains also include planning, time management, resource selection, resource management, physical and mental barriers, and learning disabilities. Table 6 summarizes the overall situation and differences between the test and reference levels. The mean for the experimental group was 40.66 and the control group was 40.70. The control class was larger than the experimental class. The standard deviation was 5.21 for the experimental group and 5.65 for the control group. independent testing of the T-sample showed that Sig=0.97>0.05. Therefore, students in the experimental class were able to control the learning process in the pretest better than students in the control class. For more details, see Table 9.

Table 6 Consideration of the differences in the perspective of the regulation of the learning process during the experiment compared to the general group

	Class	Statistic al N value	Mean value	standar d deviatio n
Target Determinati on	Experiment al group	63	44.36 2	4.38
	Control group	54	41.25 1	3.25
T-value analysis	Variance equal		1.36	
	Variance is not equal		2.10	

Students are no longer passively acquiring knowledge, learning online, and flipping Canvas courses. They are no longer passive in the classroom but are at the heart of the learning. Your enthusiasm is greatly increased. Students

should not have to absorb and assimilate information at an overall rate. For example, depending on your level of recognition on the Internet, there are also online platforms for learning and communicating between classes, classes and districts. Despite the many advantages of online platforms, it does not negate the personal interaction of teachers and students in traditional education. Watching instructional videos can solve the problem of slow learning due to differences among students, but this does not guarantee that every student will fully understand the data points of the instructional videos. In addition, after viewing the video and completing the course, students face challenges beyond understanding and questioning the learning objectives. For example, teacher-student interaction, student communication, and discussion create new situations, problems, approaches, and ideas. This requires teachers to have extensive experience in classroom organization to ensure student participation in classroom activities.

4.4. Summarizing Dimensional Analysis

Reflective measurement and assessment of school performance consist primarily of diagnostic, procedural, and outcome measures. These three items will be reviewed and evaluated. Table 7 shows the general status of the test levels and the comparison of the differences between the test levels. The mean value for the experimental group was 20.83 and for the control group 20.00. by independent samples t-test, Sig=0.30,0.05. Thus, in the pretest, the students in the experimental and control classes were significantly higher than those in the control class in terms of analysis and assessment of learning outcomes.

Table 7 Consideration of differences in the perspective of reflection and evaluation of learning in the experimental process and the general group

	Class	Statistic al N value	Mea n valu e	standard deviatio n
Objective determinati on	Experiment al group	63	19.6 3	4.32
	Control group	54	17.7 8	6.35
T-value analysis	Variance equal		0.21	
	Variance is not equal		0.31	

5. Conclusion

5.1. The results of this research

The analysis of the test results and questionnaires showed that the students in the experimental class not only responded better to the post-test requirements but also showed positive attitudes towards the students in the control class in all aspects, rather than adopting e-learning and structure in the translation class. The findings were as follows: first, increased academic independence of the

students. Because teachers did not translate classroom data points based on Canvas' e-learning and classroom flipping requirements, students were required to watch the videos ahead of time, learn on their own, identify problems, and bring them to class for discussion and resolution. This helps students learn independently. Second, it improves student learning outcomes. Based on the results of the previous and post-tests, there was no significant difference between the mean of the experimental group (77.00) and the control group (78.00). The mean of the experimental class (73.34) was much higher than the mean of the control class (68.90). In the control class, students brought the questions into the classroom, discussed them with their group members, and found the answers together. At the end of the experiment, the results showed that students in the experimental class, who were used to teamwork and group learning, preferred to work with their classmates rather than study alone compared to the control group.

5.2. Shortcomings of this study

The number of courses was limited because the authors offered a small language course. In the Canvas e-learning experience and the opposite model in Japanese elementary schools, only 41 students were enrolled in a class with very few courses. The scope of technological services was narrow and limited. Therefore, in future studies of such teaching experiments, should increase the number of subjects accordingly and increase the trial period to make the experiments more objective and scientific and the proposed strategies more practical.

Due to the limitations of the authors' work, only flipped Japanese language learning was conducted in Canvas e-learning and flipped classroom teaching. Unfortunately, due to limited effort, many of the practical lessons could not be tested in a short period. In general, the topics tested were relatively simple and should have included some limitations. Unfortunately, the educational experiments were not conducted from different perspectives and were not tested and analyzed from different perspectives. Therefore, in the experimental study of Canvas e-learning, the range of topics should be extended and fully validated from different perspectives and directions. The method of statistical analysis after the questionnaire before and after the training experience was also relatively simple: statistical analysis was performed using only SPSS statistical software, without checking different methods. Future studies should deepen not only the amount of data but also the research to make it more scientific and complete.

5.3. Related Outlook

Although this study conducted some practical pedagogical tests on the application of Canvas in e-learning and

excluded Japanese language teaching, the scope and depth of practice and theory were far from adequate due to the limited ability and effort of the authors. Therefore, subsequent studies will test alternative approaches.

The experimental study showed that Canvas online learning and classroom flipping can improve students' ability to learn Japanese, improve Japanese teaching methods, and increase students' learning efficiency at both college and university levels.

National e-learning research on Canvas continues, and vice versa. Most of the research is a summary and reflection of Canvas e-learning and back-to-school theory, with little practical application research. Little research has been conducted on foreign languages, especially Japanese. The introduction of Canvas e-learning and disruptive classrooms has changed traditional learning styles. Although online Canvas learning models and classroom flipping seem much simpler, classroom preparation adds more than traditional teaching methods, so many teachers do not want to try online Canvas or classroom flipping. However, the authors argue that teaching practices must actively investigate different pedagogical approaches, be bold and innovative, challenge new technologies and models, and adapt to the information age and information-age students. This study aims to examine the application and research of the Canvas e-learning model and the flipped classroom learning model. These studies are still very vague, and the perspective analysis is not comprehensive. This will be the basis for future research.

References

- [1] M. Birkett, J. Melville,(2022) Reprint of Network Canvas: Key decisions in the design of an interviewer-assisted network data collection software suite. *Social Networks*. 20:202~203.
- [2] Manish S, Phymar S,(2022) Safety of COVID-19 vaccines in pregnancy: a Canadian National Vaccine Safety (CANVAS) network cohort study. *The Lancet Infectious Diseases*. 19:17~18.
- [3] Claudia H, Bernhard T,(2022) The infrastructure transition canvas: A tool for strategic urban infrastructure planning. *Nature-Based Solutions*. 63:31~32.
- [4] Taofeeq D. Moshood,(2022)Lean business model canvas and sustainable innovation business model based on the industrial synergy of microalgae cultivation. *Environmental Challenges*. 32:54~55.
- [5] Javier G S, Sergi S,(2022) Conceptualisation of the Port of the Future based on the Business Canvas Model: A case study of the Vision 2040 for Barcelona. *Case Studies on Transport Policy*.8:78~81.
- [6] Morgane M, Juan S,(2021) Mercury-free artisanal and small-scale gold mining: Proposing a community-business model canvas. *The Extractive Industries and Society*.4:55~56.
- [7] Rico A, Aminou A,(2022) An extended Canvas business model: A tool for sustainable technology transfer and adoption. *Technology in Society*.25:33~34.
- [8] Mirco M, Elisa R,(2021) Augmented Workforce Canvas: a management tool for guiding human-centric, value-

- driven human-technology integration in the industry. *Computers & Industrial Engineering*.14:33~36.
- [9] Priya P, Priya P,(2022)CANVAS- an international collaboration. [LDQUO]A Comparison of Non-Absorbable Sutures Versus Absorbable Sutures for Skin surgery[RDQUO]. *British Journal of Oral and Maxillofacial Surgery*.19:22~23.
- [10] Ibrahim Youssef Alyoussef,(2022) Acceptance of a flipped classroom to improve university students' learning: An empirical study on the TAM model and the unified theory of acceptance and use of technology (UTAUT), *Heliyon*,23:45~46.
- [11] Tufan A, Figen I.(2022) Impact of flipped classroom approach on undergraduate nursing student's critical thinking skills. *Journal of Professional Nursing*, 69:52~55.
- [12] Turki M A, Farrah D,(2022) Dataset on the relationships between flipped classroom approach, students' learning satisfaction and online learning anxiety in the context of Saudi Arabian higher education institutions. *Data in Brief*. 15:84~89.
- [13] Laura B, Robin K,(2022) Exploring flipped classrooms in undergraduate nursing and health science: A systematic review. 28:35~36.
- [14] Punithalingam Y, Yan C,(2022) University teachers' perceptions of readiness for flipped classroom pedagogy in undergraduate nursing education: A qualitative study. *Journal of Professional Nursing*. 25:89~91.
- [15] M. Barranquero-Herbosa,(2022) Effectiveness of flipped classroom in nursing education: A systematic review of systematic and integrative reviews. *International Journal of Nursing Studies*. 21:98~100.
- [16] Kimberly E, Jill R,(2022) Innovative use of a flipped-classroom approach to teaching fundamental nursing skills, *Teaching and Learning in Nursing*,13:55~56.
- [17] Eula M, Gayatri N,(2022) Exploring the lived experience of student nurses perspective of racism within education and clinical practice: Utilising the flipped classroom. *Nurse Education Today*.63:85~86.
- [18] Tiffany R, Shin,(2022) Evaluating the impact of a flipped classroom model based on the cognitive science of learning strategies in a pharmacotherapy course. *Currents in Pharmacy Teaching and Learning*.25:56~58.
- [19] Fatma B,(2022) Flatbread - A canvas for innovation: A review. *Applied Food Research*. 63:33~62.
- [20] Tomáš K, Jan B,(2022) Convolutional neural network exploiting pixel surroundings to reveal hidden features in artwork NIR reflectograms. *Journal of Cultural Heritage*. 4:98~101.
- [21] Leanna L,Petra G. Effectiveness of flipped classroom format in quantitative and non-quantitative business courses – A meta-analysis[J]. *The International Journal of Management Education*,2023,21(3).
- [22] Kittichai N. The Feasibility of an Innovative Gamified Flipped Classroom Application for University Students in EFL Context: An Account of Autonomous Learning[J]. *English Language Teaching*,2023,16(8).
- [23] Liu F. Application and Implementation of Flipped Classroom in College Chemistry Teaching under the OBE Concept[J]. *Frontiers in Educational Research*,2023,6(14).